

## Title (en)

A process for generating codes for CDMA communications, system and computer program

## Title (de)

Verfahren, System und Computerprogramm zur Erzeugung von Codes für CDMA-Nachrichtenübertragung

## Title (fr)

Procédé, système et programme pour générer des codes pour communications AMDC

## Publication

**EP 1343265 A1 20030910 (EN)**

## Application

**EP 02425130 A 20020307**

## Priority

EP 02425130 A 20020307

## Abstract (en)

In order to generate the main scrambling code of order N and the secondary scrambling code of order K within the set identified by the primary scrambling code of order N, a first m-sequence and a second m-sequence are generated using Fibonacci linear feedback shift registers (LFSRs). Then said first m-sequence and said second m-sequence are modulo-2 added so as to form the I branch of said primary scrambling code. A first T-bit masking word and a second T-bit masking word of rank 0 (X0-MASK, Y0-MASK) are generated that correspond to the polynomial time shifts (X0 (D), Y0 (D)), and the intermediate taps of the X and y registers respectively chosen by means of said masking words (X0-MASK, Y0-MASK) are modulo-2 added so as to generate a third sequence and a fourth sequence which are modulo-2 added together to form the Q branch of said primary scrambling code. With the choice, starting from the least significant Kmax bits of the register X, of the K-th intermediate tap corresponding to the secondary scrambling code of order K within said set identified by the primary scrambling code of order N, a fifth sequence is generated, which, modulo-2 added to said second sequence, forms the I branch of said secondary scrambling code. By modulo-2 summing the intermediate taps of the register X masked by means of the aforesaid first masking word of rank N (XN-MASK), a sixth sequence is generated, which, modulo-2 added to the aforesaid fourth sequence, forms the Q branch of the secondary scrambling code. <IMAGE>

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## Citation (search report)

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- [A] EP 0963070 A1 19991208 - NIPPON TELEGRAPH & TELEPHONE [JP]
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